PATENT
U.S. Patent Application Serial No. 09/594,100
Attorney Docket No. 99-422

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	
	)	
Michael A. DEAN	)	Group Art Unit: 2135
	)	
Application No.: 09/594,100	)	Examiner: LEYNNA A. HA
	)	
Filed: June 14, 2000	)	
	)	
For: METHOD AND APPARATUS FOR DYNAMIC MAPPING	)	

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief under Rule 41.37 appealing the final decision of the Examiner dated January 21, 2005 and responsive to the Advisory Action of April 27, 2005. Each of the topics required by Rule 41.37 is presented herewith and labeled in accordance therewith.

I. Real Party in Interest

The real parties in interest are: BBNT Solutions LLC, joint assignee, a limited liability company organized and existing under the laws of the state of Delaware, and having a principal business address of 10 Moulton Street, Cambridge, Massachusetts 02138; Genuity, Inc., joint assignee, a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a principal business address at 3 Van de Graaff Drive, Burlington, Massachusetts 01803; and Verizon Corporate Services Group Inc., joint assignee, a corporation organized and existing under the laws of the state of New York, and having a principal business address of 1095 Avenue of the Americas, New York, New York 10036.

II. Related Appeals and Interference

There are no appeals or interferences related to the present application of which the Appellant is aware.

III. Status of Claims

Claims 1-33 are currently pending in the application and all stand finally rejected. Appellant appeals from the final rejection of claims 1-33, the claims being presented in the Claims Appendix

IV. Status of Amendments

Subsequent to the final Office Action of January 21, 2005 (hereinafter "final Office Action"), Appellant filed an after-final response on March 21, 2005. In that

response Appellant did not amend, add or cancel any claims. In the Advisory Action of April 27, 2005, the Examiner indicated that the request for reconsideration has been considered but does not place the application in condition for allowance. Accordingly, there are no outstanding after-final amendments to the claims, and claims 1-33 stand rejected for purposes of this appeal.

Summary of Claimed Subject Matter

Applicant's claimed subject matter includes system and method for securing information transmitted between a client (110) and a server (150) in a client-server network (100). A client-side device (120) receives data from client 110 to be transmitted to server 150 and modifies destination address and port information. A dynamic address translation device (140) at the server side receives the modified destination address and port information, translates this information back to the real destination address and port information of server 150, and forwards the data to the server. In reverse operation, when data packets are transmitted from server 150 to client 110, the reverse process may be used. (Figure 1; Appellant's specification, page 3, line 29 - page 4, line 5; page 15, lines 24-25).

More specifically, two different network devices (address translators 120 and 140) are communicatively coupled through a network (160) such as the Internet, as shown in Fig. 1. When a client (110) generates a data packet intended for a server (150) which packet therefore includes the server's address as destination address, that packet is intercepted by the client side address translator (120). Address translator 120 maps the destination information from the server's address and port to another network device's

address and port. This other address and port belongs to the server-side address translator (140). Client-side address translator 120 then transmits the data packet with mapped destination address via network 160 (i.e., Internet, LAN, WAN, etc.) to server-side address translator 140 which receives the packet and translates the mapped destination information back to the original (server) destination information. Address translator 140 then transmits the data packet to server 150 via another network 170 (the Internet, a LAN, a WAN, intranet, etc.). (Figure 1; Appellant's specification, page 4, line 7 - page 5, line 23).

When the server 150 replies to the data packet request received from client 110, the process reverses itself, with address translator 140 intercepting the reply from server 150 via network 170, mapping the destination address from that of client 110 to that of address translator 120 and sending the reply via the network (160) to address translator 120. Then address translator 120 translates the address in the reply to that of the client (110) and forwards the reply to the client. (Figure 1; Appellant's specification, page 4, line 7 - page 5, line23; page 15, line 22 - page 16, line 8).

In this manner, at least the client-to-server true-destination address is kept secret while the data packet request is transmitted through the network 160 from client to server, and the server-to-client true-destination address is kept secret while the data packet reply is transmitted back through the network 160 from server to client. Therefore, any would-be hacker or adversary using packet sniffers or other devices to obtain confidential destination address information from these packets while they are being transmitted through a network 160 such as the Internet, shall be thwarted. (Appellant's specification, at least page 5, lines 15-18; page 10, lines 17-19).

VI. Grounds of Rejection to be Reviewed on Appeal

In the final Office Action, the following rejections were made:

Claims 1-33 were rejected under 35 U.S.C. § 102 (e) as being anticipated by U.S. Patent No. 6,130,892 to Short et al., (hereinafter "Short").

The sole issue presented in this appeal is whether or not claims 1-33 are anticipated by Short.

VII. Argument

A. The Short Disclosure

Short discloses routers that operate with portable terminals. (column 1, line 66 to column 2, line 3) A portable terminal, such as a laptop computer, has a permanent address in its LAN. (column 6, lines 5-7; column 2, lines 9-10) A "nomadic" router enables the portable laptop computer to be connected to any location on the Internet, and the router automatically and transparently re-configures the laptop to its new location and processes outgoing and incoming data. (col. 1, line 66 to col. 2, line 6). The nomadic router can be physically attached to its client laptop computer (column 4, lines 13-17). The nomadic router includes a processor which appears as the home network (LAN) to the laptop computer and appears as the laptop computer to the home network. (column 2, lines 7-9) The client laptop computer transmits outgoing data to the LAN including its permanent address as source address, and the nomadic router's processor *translates* the *outgoing data* by replacing the permanent address with the router address as the *source address*. (column 2, lines 11-15). In reverse, the nomadic router receives incoming data

from the LAN including the nomadic router's address as destination address, and the same nomadic router processor *reverse translates* the *incoming data* by replacing the nomadic router address with the laptop's permanent address as the *destination address*. (Column 2, lines 15-20, where "terminal" is an error and should be "nomadic router") These translation and reverse translation operations are performed on *different* outgoing and incoming data respectively within the processor of the *same* nomadic router. These are *the only translations* disclosed in Short. The nomadic router is sometimes called the "portable" nomadic router since it travels with the laptop computer.

There are multiple nomadic routers disclosed in Short. In addition to the portable nomadic router, a "fixed" nomadic router is disclosed which acts as a surrogate or home agent for the user of the client laptop when it is on travel. The fixed nomadic router and its portable nomadic router counterpart communicate with each other by way of the *Internet Tunneling Protocol*, thereby permitting *encapsulation* of data packets. (column 16, lines 30-63). Encapsulation does not change the original destination address, since it is accomplished by adding an outer IP header before the original IP header, where one IP packet is effectively carried inside another IP packet - clearly not address translation.

B. Independent Claim 1 and its Dependencies (Claims 2-10)

Independent claim 1 recites *interalia*:

> "receiving in a **first address translator** a data packet **from a client**, the data packet including a first destination address; changing the first destination address to a second destination address in the first address translator; transmitting the data packet with the second destination address from the first address translator via the network; receiving in a **second address translator** the data packet transmitted via the network; translating the second destination address back to the first destination address in the second address translator; and forwarding the data packet from the second address translator to the server using the first destination address". (Emphasis added.)

It is clear that ***two different address translators*** are recited in claim 1. In Applicant's Figs. 1 -3 two address translators 120 and 140 are shown. (Specification, page 4, line 7 - page 8, line 16). As claimed, the first address translator (120) changes the first destination address (which is the server's IP address) to a second destination address (which is the IP address of the second translator). The second address translator (140) receives the data packet and translates the second destination address back to the first destination address (i.e., reverse translates back to the server's IP address). It is clear that claim 1 is reciting methodology for performing the equivalent of two separate address translations on the *same* data packet as it is traversing the network in the *same* direction from client to server. The first address change is performed in the first address translator (120) and the second, reverse address translation is performed in the second address translator (140), the mapping and the translation being performed on the packet as it is being sent from client to server.

By contrast, in Short, although a forward translation and a reverse translation are taught, the forward translation (changing the source address from that of the client laptop computer to that of the nomadic router) is for a first data packet going in a first direction (i.e., from client laptop computer to home LAN), but the reverse translation (changing the destination address from that of the nomadic router to that of the laptop computer) is for a *different* data packet returning in the *opposite* direction (i.e., from LAN to client laptop computer). (Short, column 13, lines 19-30) This teaching in Short, therefore, does not disclose or suggest Appellant's (forward) mapping and (reverse) translation which are made on the *same* packet going in the *same* direction from client to server, as recited in claim 1.

The Advisory Action sets-forth what is presumed to be the Examiner's latest position, citing portions of Short not previously cited in the Final Office Action of January 21, 2005. In the Advisory Action, the Examiner states:

> "The request for reconsideration has been considered but does NOT place the application in condition for allowance because: claims 1-33 remains rejected in view of Short, et al. Short discloses address translation in the form of nomadic router wherein a nomadic router that is disclosed in Short performs the address translation. Hence, portable nomadic router or "fixed" nomadic router is a nomadic router that translates the address for outgoing data and incoming data (col. 2, lines 7-15). As claimed, Short discloses a first and a second nomadic router (col. 11, line 3 and col. 14, lines 61-63) wherein the first nomadic router translates and transmits the packet to the "fixed" nomadic router and vise versa for address translation (col. 16, lines 43-65)."

Accordingly, the Examiner's position is that the portable nomadic router or the fixed nomadic router translates the address for outgoing data and incoming data and relies on column 2, lines 7-15 for support of this position. However, that passage, at best, merely describes the replacing of the terminal's (e.g., laptop computer's) permanent address with the router address as *source* address. By contrast, in Appellant's first translator, as recited in claim 1, the *destination* address of the outgoing data packet from the client is mapped to a different address, not involving a replacement of the client' source address as discussed in Short. Moreover, nothing in this passage refers to a second reverse translation of the destination address back to that of the server's IP address, as claimed.

The Examiner further relies upon column 11, line 3 "Each nomadic router..." and column 14, lines 61-63 "...other nomadic routers..." to show that Short discloses multiple routers and therefore discloses first and second nomadic routers. Appellant agrees with the Examiner that Short does show first and second nomadic routers[1].

[1] Fig. 12A-D in Short discloses multiple routers, nomadic router 10 and *conventional* router 26 (*see* column 11, line 9). Router 26 is used merely to connect to the Internet and is not a nomadic router.

However, this point is immaterial to Appellant's claims because Short does not show first and second nomadic router *translators* - both routers do not translate. Short discloses a fixed nomadic router and a portable nomadic router in column 16, lines 30-67. (The "portable nomadic router" is also sometimes referred to in Short simply as the "nomadic router.") The fixed nomadic router is permanently located at the physical location of the LAN. Although this section does provide a disclosure of first (portable) and second (fixed) nomadic routers, it merely describes operation of these routers in accordance with the *Internet Tunneling Protocol* (col. 16, line 62) which does not involve translating or changing address information.

As understood by those of ordinary skill in this art, an IP tunnel allows existing IP packets through the tunnel provided that they are inside of other (encapsulating) IP packets which are destined for tunnel endpoints. When an IP packet is encapsulated, its IP address is not changed or translated. When an encapsulating packet reaches either tunnel endpoint, the tunnel's IP header and any additional tunnel headers are stripped off the encapsulating packet, and the encapsulated, original IP packet with its *original destination address* is injected into the IP stack of the tunnel endpoint. This is not address translation because the data packet's original IP destination address was never changed to a different IP address. This is encapsulation. Tunneling, as referred to in Short, is therefore not address translation. In the Advisory Action the Examiner refers to col. 16, lines 43-65, which includes the above-noted reference to Internet Tunneling Protocol, to allege that the first nomadic router translates and transmits the packet to the fixed nomadic router and vice versa "for address translation" but, as explained, tunneling and encapsulation are not address translation.

MPEP § 2131 states that to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, Short does not teach each and every element of claim 1. Indeed, Short does not teach multiple elements of claim 1. Specifically, Short does *not* teach:

(1) "changing the first *destination* address to a second *destination* address in the first address translator" as recited in claim 1 (Emphasis added. With respect to a data packet coming from its client, Short changes only the source address in its nomadic router; there is no second destination address.);

(2) "transmitting the data packet with the *second destination* address from the first address translator via the network" as recited in claim 1 (Emphasis added. Since Short did not change the destination address there is no second destination address.);

(3) "receiving in a *second address translator* the data packet transmitted via the network" as recited in claim 1, (Emphasis added. There is no second address translator, only a second router which operates in accordance with Internet Tunneling Protocol and thus does not translate addresses.);

(4) "translating the *second destination address* back to the first destination address in the *second address translator*" as recited in claim 1 (Emphasis added. There is no second destination address; there is no second address translator - only a second router.); and

(5) "forwarding the data packet from the *second address translator* to the server using the first destination address" as recited in claim 1 (Emphasis added. There is no second address translator, only a second router.).

Thus, the above-noted five elements of claim 1 are not shown or described in Short. At best, for the condition where a client is sending a data packet to its server as recited in claim 1, Short teaches the changing of the Client's *source* address of that data packet in its "portable" nomadic -router-translator to that router's address, as a translated source address for that data packet which is then "tunneled" with that translated source address to the "fixed" nomadic router. This does not even begin to describe the subject matter of Appellant's claim 1 relating to translating *destination* addresses[2], as detailed above.

For the reasons given above, the 35 U.S.C. § 102(e) rejection of claim 1 should be REVERSED and the claim allowed.

The rejection of claims 2-10, depending either directly or indirectly from claim 1, should also be REVERSED, at least for reasons based on their respective dependencies from an allowable base claim.

C. Independent Claim 11 and its Dependencies (Claims 12-15)

Independent claim 11 recites *interalia*:

> "a processor configured to: receive in a **first address translator** a data packet including a first destination address, the first destination address representing a real destination address, change the first destination address to a second destination address in the first address translator using the mapping algorithm, and transmit the data packet with the second destination address to a **second address translator**". (Emphasis added.)

[2] The only reference to translating *destination* addresses in Short is in connection with a data packet being sent from the LAN to the client portable laptop computer, and the destination address is translated in the same portable nomadic router that translates the laptop computer's source address when the data packet flow is in the other direction, from client to server.

It is again clear that two different translators are recited in claim 11. For reasons given above with respect to claim 1, Short does not disclose two translators. MPEP 2131 indicates that to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, Short does not teach each and every element of claim 11. Specifically, Short does ***not*** teach at least: "a processor configured to:... transmit the data packet with the second destination address to a *second address translator*" as recited in claim 11 (Emphasis added.). Therefore Short does not anticipate independent claim 11. For at least this reason, the 35 U.S.C. § 102(e) rejection of claim 11 should be REVERSED and the claim allowed.

The rejection of claims 12-15, each depending directly from claim 11, should also be REVERSED, at least for reasons based on their respective dependencies from an allowable base claim.

D. Independent Claim 16 and its Dependencies (Claims 17-20)

Independent claim 16 recites:

> "A computer-readable medium having stored thereon a plurality of sequences of instructions, said instructions including sequences of instructions which, when executed by a processor, cause said processor to perform the steps of: receiving in **a first address translator** a data packet including a first destination address, the first destination address representing a real destination address; changing the first destination address to a second destination address in the first address translator using a mapping algorithm; and transmitting the data packet with the second destination address to **a second address translator**." (Emphasis added.)

It is again clear that two different translators are recited in claim 16. As discussed above with respect to claim 1, Short does not disclose two translators. MPEP 2131

indicates that to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, Short does not teach each and every element of claim 16. Specifically, Short does ***not*** teach at least: "A computer-readable medium having stored thereon a plurality of sequences of instructions, said instructions including sequences of instructions which, when executed by a processor, cause said processor to perform the steps of: .... transmitting the data packet with the second destination address to *a second address translator*" as recited in claim 16 (Emphasis added.). Therefore Short does not anticipate independent claim 16. For at least this reason, the 35 U.S.C. § 102(e) rejection of claim 16 should be REVERSED and the claim allowed.

The rejection of claim 17-20, each depending directly from claim 16, should also be REVERSED, at least for reasons based on their respective dependencies from an allowable base claim.

E. Independent Claim 21 and its Dependencies (Claims 22-25)

Independent claim 21 recites *interalia*:

> "a processor configured to: receive in a **first address translator** a data packet including a first destination address, the first destination address representing a real destination address, change the first destination address to a second destination address in the first address translator using the mapping algorithm, and transmit the data packet with the second destination address to a **second address translator**." (Emphasis added.)

It is again clear that two different translators are recited in claim 21. As discussed above with respect to claim 1, Short does not disclose two translators. MPEP 2131 indicates that to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros.*

v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, Short does not teach each and every element of claim 21. Specifically, Short does *not* teach at least: "a processor configured to:... transmit the data packet with the second destination address to a *second address translator*" as recited in claim 21 (Emphasis added.). Therefore Short does not anticipate independent claim 21. For at least this reason, the 35 U.S.C. § 102(e) rejection of claim 21 should be REVERSED and the claim allowed.

The rejection of claims 22-25, each depending directly from claim 21, should also be REVERSED, at least for reasons based on their respective dependencies from an allowable base claim.

F. Independent Claim 26 and Its Dependencies (Claims 27-30)

Independent claim 26 recites *interalia*:

> "A computer-readable medium having stored thereon a plurality of sequences of instructions, said instructions including sequences of instructions which, when executed by a processor, cause said processor to perform the steps of: receiving from **a first address translator** into **a second address translator** a data packet including a first destination address, the first destination address representing a mapped destination address; translating the first destination address to a second destination address in **the second address translator** using a translation algorithm, the second destination address representing a real destination address; and forwarding the data packet from **the second address translator** using the second destination address." (Emphasis added.)

It is again clear that two different translators are recited in claim 26. As discussed above with respect to claim 1, Short does not disclose two translators. MPEP 2131 indicates that to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros.*

v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, Short does not teach *any* of the elements of claim 26. Specifically, Short does *not* teach at least: a processor to perform the steps of:

(1) "receiving from a first address translator into a *second address translator* a data packet including a first destination address, the first destination address representing a mapped destination address" as recited in claim 26 (Emphasis added) because there is no second address translator in Short;

(2) "translating the first destination address to a second destination address in the *second address translator* using a translation algorithm, the second destination address representing a real destination address" as recited in claim 26 (Emphasis added) because there is no second address translator in Short; and

(3) "forwarding the data packet from the *second address translator* using the second destination address" as recited in claim 26 (Emphasis added) because there is no second address translator in Short.

Therefore Short does not anticipate independent claim 26. For at least these reasons, the 35 U.S.C. § 102(e) rejection of claim 26 should be REVERSED and the claim allowed.

The rejection of claims 27-30, each depending directly from claim 26, should also be REVERSED, at least for reasons based on their respective dependencies from an allowable base claim.

G. Independent Claim 31

Independent claim 31 recites:

> "A system for mapping and translating destination information in a network including at least one server for communicating with a plurality of client

workstations, comprising: means for receiving from one of the client workstations a data packet including a first destination address; means for changing the first destination address to a **second destination address** in a first address translator; means for transmitting the data packet with the **second destination address** from the first address translator via the network; means for receiving in a **second address translator** the data packet transmitted via the network; means for translating the **second destination address** back to the first destination address in the **second address translator**; and means for forwarding the data packet from the **second address translator** to the server using the first destination address." (Emphasis added.)

MPEP 2131 indicates that to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, Short does not teach each and every element of claim 31. Indeed, Short does not teach multiple elements of claim 31. Specifically, Short does *not* teach:

(1) "means for changing the first *destination* address to a second *destination* address in a first address translator" as recited in claim 31 (Emphasis added. With respect to a data packet being received from its client, Short changes only the source address in its nomadic router; there is no second destination address.);

(2) "means for transmitting the data packet with the *second destination* address from the first address translator via the network" as recited in claim 31. Since it did not change the destination address there is no second destination address.);

(3) "means for receiving in a *second address translator* the data packet transmitted via the network" as recited in claim 31 (Emphasis added. There is no

second address translator, only a second router which operates in accordance with Internet Tunneling Protocol and thus does not translate addresses.);

(4) "means for translating the *second destination address* back to the first destination address in the *second address translator*" as recited in claim 31 (Emphasis added. There is no second destination address; there is no second address translator - only a second router.); and

(5) "means for forwarding the data packet from the *second address translator* to the server using the first destination address" as recited in claim 31 (Emphasis added. There is no second address translator, only a second router.).

Thus, the above-noted five elements of claim 31 are not shown or described in Short. At best, for the condition where a client is sending a data packet to its server as recited in claim 31, Short teaches the changing of the Client's *source* address of that data packet in its "portable" nomadic -router-translator to that router's address as a translated source address for that data packet which is then "tunneled" with that translated source address to the "fixed" nomadic router. This does not even begin to describe the subject matter of Appellant's claim 31 relating to translating destination addresses, as detailed above.

For the reasons given above, the 35 U.S.C. § 102(e) rejection of claim 31 should be REVERSED and the claim allowed.

H. Independent Claim 32 and its Dependency (Claim 33)

Independent claim 32 recites *interalia*:

"In a network including at least one client and at least one server, a system comprising: **a first address translator** configured to: receive a data packet from a client, the data packet including a first destination address wherein the first destination address represents a real destination address, change the first destination address to a **second destination address**, and transmit the data packet with the **second destination address** via the network; and **a second address**

translator configured to: receive the data packet transmitted via the network, translate the second destination address back to the first destination address, and forward the data packet to the server using the first destination address.

MPEP 2131 indicates that to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In this case, Short does not teach each and every element of claim 32. Indeed, Short does not teach multiple elements of claim 32. Specifically, Short does *not* teach:

(1) "a first address translator configured to:....change the first *destination* address to a second *destination* address" as recited in claim 32 (Emphasis added. With respect to a data packet being received from its client, Short changes only the source address in its nomadic router; there is no second destination address.);

(2) "a first address translator configured to: ...transmit the data packet with the *second destination* address via the network" as recited in claim 32 (Emphasis added. Since it did not change the destination address there is no second destination address.);

(3) "a *second address translator* configured to:...receive the data packet transmitted via the network" as recited in claim 32 (Emphasis added. There is no second address translator, only a second router which operates in accordance with Internet Tunneling Protocol and thus does not translate addresses.);

(4) "a *second address translator* configured to:...translate the *second destination address* back to the first destination address" as recited in claim 32 (Emphasis added. There is no second destination address; there is no second address translator - only a second router.); and

(5) "a *second address translator* configured to:... forward the data packet to the server using the first destination address" as recited in claim 32 (Emphasis added. There is no second address translator, only a second router.).

Thus, the above-noted five elements of claim 32 are not shown or described in Short. At best, for the condition where a client is sending a data packet to its server as recited in claim 32, Short teaches the changing of the Client's *source* address of that data packet in its "portable" nomadic -router-translator to that router's address as a translated source address for that data packet which is then "tunneled" with that translated source address to the "fixed" nomadic router. This does not even begin to describe the subject matter of Appellant's claim 32 relating to translating destination addresses, as detailed above.

For the reasons given above, the 35 U.S.C. § 102(e) rejection of claim 32 should be REVERSED and the claim allowed.

The rejection of claim 33, depending from claim 32, should also be REVERSED, at least for reasons based on its respective dependency from an allowable base claim.

VIII. CONCLUSION

In view of the foregoing arguments, Appellant respectfully submits that the pending claims are novel over the cited reference. The Examiner's rejection of claims 1-33 is improper because the prior art of record does not teach or suggest each and every element in each of claims 1-33. In view of the above analysis, a reversal of the rejections of record is respectfully requested of the Honorable Board.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 07-2347 and please credit any excess fees to such deposit account.

Verizon Services Group

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IX. Claims Appendix

1. (previously presented) In a network including at least one server for communicating with at least one client, a method comprising:

receiving in a first address translator a data packet from a client, the data packet including a first destination address;

changing the first destination address to a second destination address in the first address translator;

transmitting the data packet with the second destination address from the first address translator via the network;

receiving in a second address translator the data packet transmitted via the network;

translating the second destination address back to the first destination address in the second address translator; and

forwarding the data packet from the second address translator to the server using the first destination address.

2. (original) The method of claim 1, further comprising:

encrypting the second destination address before transmitting the data packet.

3. (original) The method of claim 2, further comprising:

decrypting the second destination address before translating the second destination address.

4. (original) The method of claim 1, wherein the changing includes:

mapping the first destination address to the second destination address using a mapping algorithm.

5. (original) The method of claim 1, wherein the first destination address includes first port information associated with a port on the server and the changing includes:

mapping the first port information to second port information.

6. (original) The method of claim 5, wherein the translating includes:

translating the second port information back to the first port information.

7. (original) The method of claim 1, further comprising:

determining whether the first destination address is included in a set of predetermined addresses before changing the first destination address.

8. (original) The method of claim 7, further comprising

determining whether the second destination address is included in a set of predetermined addresses before translating the second destination address.

9. (original) The method of claim 1, further comprising:

determining whether to change the first destination address based on a current time and whether the first destination address is in a set of predetermined addresses.

10. (original) The method of claim 9, further comprising:

determining whether to translate the second destination address based on the time and whether the second destination address is in a set of predetermined address.

11. (previously presented) A system for mapping destination information, comprising:

a memory configured to store a mapping algorithm; and

a processor configured to:

receive in a first address translator a data packet including a first destination address, the first destination address representing a real destination address,

change the first destination address to a second destination address in the first address translator using the mapping algorithm, and

transmit the data packet with the second destination address to a second address translator.

12. (original) The system of claim 11, wherein the processor is further configured to:

encrypt the second destination address before transmitting the data packet.

13. (original) The system of claim 11, wherein the data packet includes first port information associated with a server, wherein the processor is further configured to:

map the first port information to second port information using the mapping algorithm.

14. (original) The system of claim 11, wherein the processor is further configured to:

determine whether the first destination address is included in a set of predetermined addresses before changing the first destination address.

15. (original) The system of claim 11, wherein the processor is further configured to:

determine whether to change the first destination address based on a current time and whether the first destination address is in a set of predetermined addresses.

16. (previously presented) A computer-readable medium having stored thereon a plurality of sequences of instructions, said instructions including sequences of instructions which, when executed by a processor, cause said processor to perform the steps of:

receiving in a first address translator a data packet including a first destination address, the first destination address representing a real destination address;

changing the first destination address to a second destination address in the first address translator using a mapping algorithm; and

transmitting the data packet with the second destination address to a second address translator.

17. (original) The computer-readable medium of claim 16, including instructions for causing said processor to perform the further step of:

encrypting the second destination address before transmitting the data packet.

18. (original) The computer-readable medium of claim 16, wherein the first destination address includes first port information associated with a port on a server and the changing includes:

mapping the first port information to second port information.

19. (original) The computer-readable medium of claim 16, including instructions for causing said processor to perform the further step of:

determining whether the first destination address is included in a set of predetermined addresses before changing the first destination address.

20. (original) The computer-readable medium of claim 16, including instructions for causing said processor to perform the further step of:

determining whether to change the first destination address based on the time and whether the first destination address is in a set of predetermined addresses.

21. (previously presented) A system for mapping destination information, comprising:

a memory configured to store a translation algorithm; and

a processor configured to:

receive in a second address translator from a first address translator a data packet including a first destination address, the first destination address representing mapped destination address information,

translate in the second address translator the first destination address to a second destination address using the translation algorithm, the second destination address representing a real destination address, and

forward the data packet from the second address translator using the second destination address.

22. (original) The system of claim 21, the mapped destination address information being encrypted, wherein the processor is further configured to:

decrypt the mapped destination address information concurrently with the translating.

23. (original) The system of claim 21, wherein the first destination address includes first port information representing mapped port information, wherein the processor is configured to:

translate the first port information to second port information, the second port information representing real port information.

24. (original) The system of claim 21, wherein the processor is further configured to:

determine whether the first destination address is included in a set of predetermined addresses before translating the first destination address.

25. (original) The system of claim 21, wherein the processor is further configured to:

determine whether to translate the first destination address based on a current time and whether the first destination address is in a set of predetermined addresses.

26. (previously presented) A computer-readable medium having stored thereon a plurality of sequences of instructions, said instructions including sequences of instructions which, when executed by a processor, cause said processor to perform the steps of:

receiving from a first address translator into a second address translator a data packet including a first destination address, the first destination address representing a mapped destination address;

translating the first destination address to a second destination address in the second address translator using a translation algorithm, the second destination address representing a real destination address; and

forwarding the data packet from the second address translator using the second destination address.

27. (original) The computer-readable medium of claim 26, wherein the data packet comprises encrypted information, the computer-readable medium including instructions for causing said processor to perform the further step of:

decrypting the encrypted information before translating the data packet.

28. (original) The computer-readable medium of claim 26, wherein the first destination address includes first port information representing mapped port information, wherein the translating includes:

translating the first port information to second port information, the second port information representing real port information.

29. (original) The computer-readable medium of claim 26, including instructions for causing said processor to perform the further step of:

determining whether the first destination address is included in a set of predetermined addresses before translating the first destination address.

30. (original) The computer-readable medium of claim 26, including instructions for causing said processor to perform the further step of:

determining whether to translate the first destination address based on a current time and whether the first destination address is in a set of predetermined addresses.

31. (previously presented) A system for mapping and translating destination information in a network including at least one server for communicating with a plurality of client workstations, comprising:

means for receiving from one of the client workstations a data packet including a first destination address;

means for changing the first destination address to a second destination address in a first address translator;

means for transmitting the data packet with the second destination address from the first address translator via the network;

means for receiving in a second address translator the data packet transmitted via the network;

means for translating the second destination address back to the first destination address in the second address translator; and

means for forwarding the data packet from the second address translator to the server using the first destination address.

32. (previously presented) In a network including at least one client and at least one server, a system comprising:

a first address translator configured to:

receive a data packet from a client, the data packet including a first destination address wherein the first destination address represents a real destination address,

change the first destination address to a second destination address, and

transmit the data packet with the second destination address via the network; and

a second address translator configured to:

receive the data packet transmitted via the network,

translate the second destination address back to the first destination address, and

forward the data packet to the server using the first destination address.

33. (previously presented) The system of claim 32 further comprising:

the second address translator further configured to:

receive a reply data packet from the server, the reply data packet including a third destination address wherein the third destination address represents a real destination address,

change the third destination address to a fourth destination address, and

transmit the reply data packet with the fourth destination address via the network; and

the first address translator further configured to:

receive the reply data packet transmitted via the network,

translate the fourth destination address back to the third destination address, and

forward the reply data packet to the client using the third destination address.